Can Technology Undermine Macroprudential Regulation? Evidence from Online Marketplace Credit in China

ABFER-BIS-CEPR 2019

Braggion, Manconi, and Zhu
Discussion by Kelly Shue (Yale)

Recap

Eleven Chinese cities increased minimum downpayment for a second home from 60% to 70% in 2013 in an effort to curb house price growth

Data: loan applications and credit outcomes from a large marketplace lending platform, RenrenDai

Findings: Real estate investors borrowed via other, less regulated, sources to meet the increased downpayment

- Dif-if-dif: treated and control cities had parallel trends prior to 2013, and treated cities take more credit from RenrenDai after 2013
- Holding lenders fixed (to control for credit supply), borrowers from treated cities took on more credit
- Regulation failed: house price growth did not decline in treated cities

A very nice contribution

Great data: Detailed information on 1M applications and 68K loans from RenrenDai

- Hand collected: Coverage and selection issues?

Important topic: If technology undermines macroprudential regulation, then governments will become ineffective or …

- Engage in more extreme and heavy-handed regulation

Thorough analysis : Figure 1 is compelling, but the paper does far more

- Stronger effect of similar regulation in 2005 prior to rise of FinTech
- Symmetric effects with loosening of LTV caps in 2015 and 2016

Renrendai and P2P lending in China

China's P2P market: 252.8 billion yuan in 2014

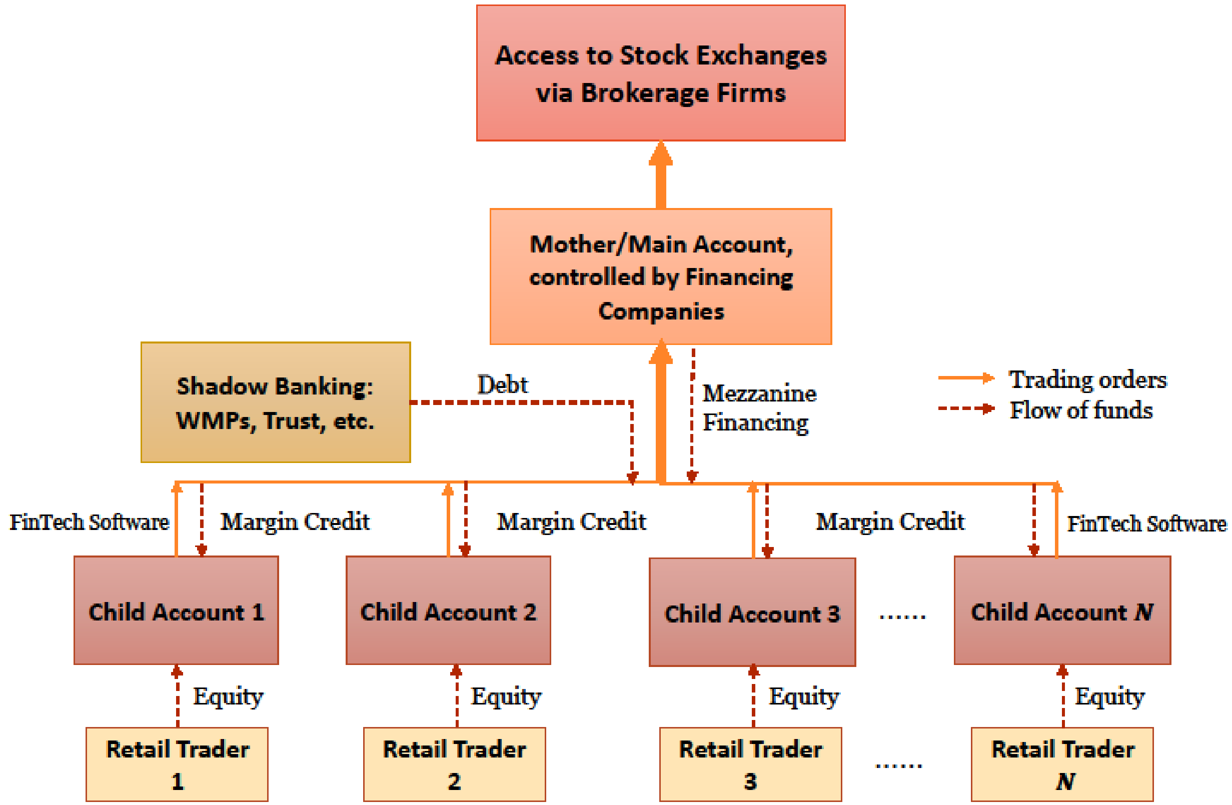
Renrendai claims 33M users and 82B Yuan in loans as of 2019

Fraud and Ponzi schemes: Ezubao ripped off 900K investors for $50B yuan

New regulation in 2016: P2P lenders must use qualified banking institution as a fund custodian

- Individuals can borrow 200K Yuan from each P2P and max of 1M yuan across lenders
- New era of contraction and consolidation

Similar regulatory arbitrage among Chinese margin traders triggered the 2015 market crash



Bian, He, Shue, and Zhou (2018)

1) Is the response to the treatment too large?

Treatment: Increased minimum downpayment for a ***second*** home from 60% to 70%

- What fraction of households or borrowers in RenrenDai are in a position to buy a second home?

Large response:

- Increase in loans from RenrenDai offsets 70% to 100% of the increase in downpayment requirements in some cities
- But, RenrenDai is only the largest among 2000 such lenders, so total increase in marketplace loans more than offsets
- Default rates increase by 45% in treated cities, but most borrowers in RenrenDai say they do not own homes

2) Is there more to the treatment?

Strength of the paper: Treatment and control cities have very similar pre-trends

Issue for interpretation: Do treated cities do more than increase downpayment requirements?

2013 Notice called for stricter enforcement of taxation on house sales and limits on house purchases

- Traditional mortgages may be controlled by SOEs and other firms with links to the government
- Credit may have tightened in treated cities in other ways
- Did the treated cities also engage in stimulus that may have increased credit demand?

3) Focus on the more surprising results

The paper focuses on a question with an obvious answer

- Can technology undermine macroprudential regulation? ***Yes***
- But there are many existing examples of regulatory arbitrage
- Shadow banking partly exists because people seek to circumvent regulation

But the paper does contain many surprising results

- Magnitudes … way more than “undermine”
- Change in house prices
- Quality of marketplace screening
- Who benefits and loses?
- Degree of regulatory arbitrage has changed from 2005 to 2013 to 2016

4) Fintech lenders are quickly getting better at screening

Paper finds that lenders do not adjust their pricing to the influx of new borrowers, even though their loans exhibit worse ex-post performance

- Implication: online marketplaces are bad at screening, so unregulated FinTech shadow credit may be destabilizing / increase risk
- However, RenrenDai 2013 is not Renrendai 2019 or 2029

Huge advances in screening technology within Fintech

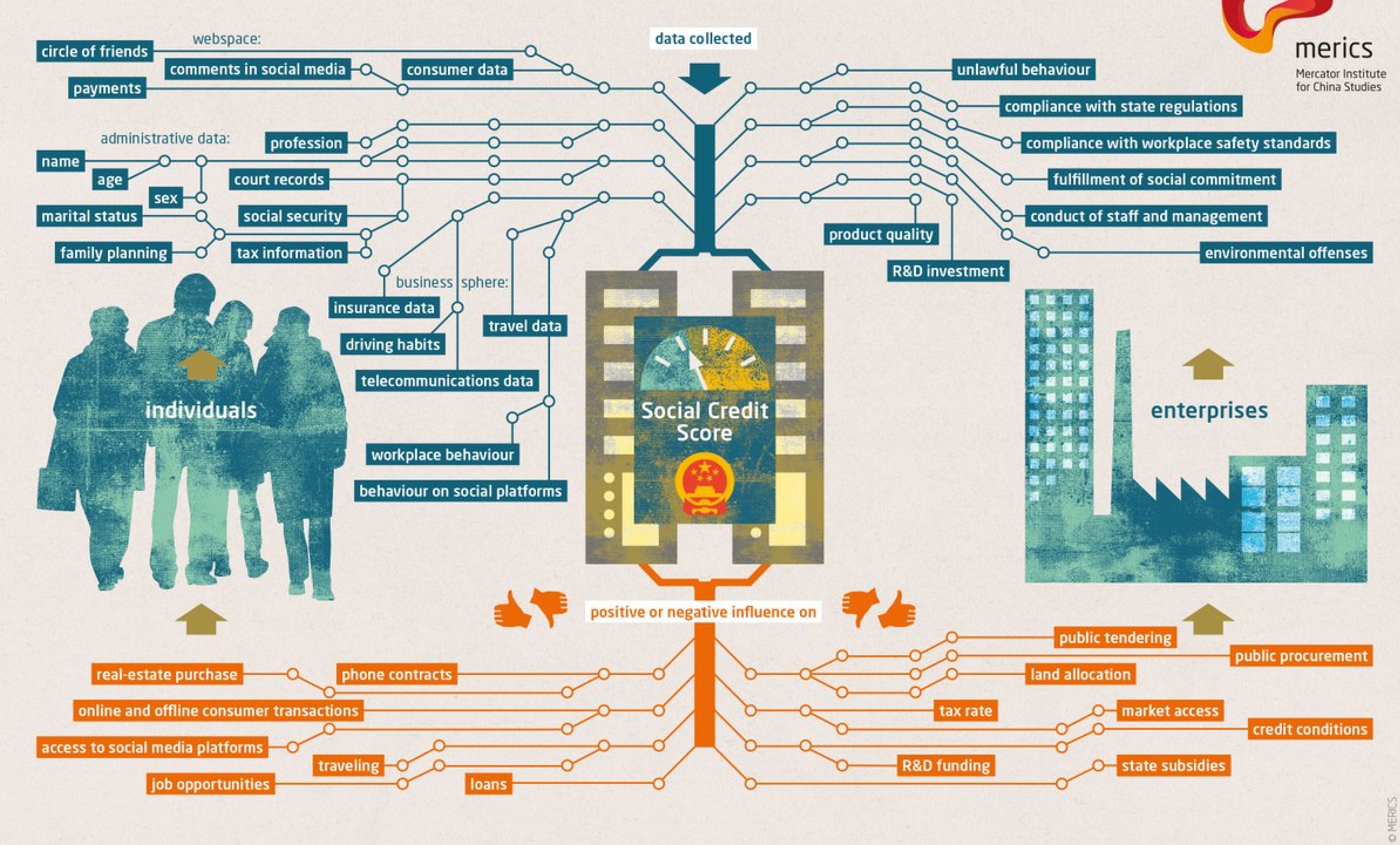
- Berg et al. 2018: Android + Yahoo users are 10X more likely to default than Mac + T-online users (> top vs. bottom decile spread in FICO)
- Online platforms may outperform banks in screening and monitoring

Use of digital footprint credit scores in China

- Alibaba's Sesame Credit uses social credit scores from Ant Financial
  - Hua Bei (Just Spend): Users pay for purchases in installments within a month after goods are delivered
- Also Rapid Finance, CreditEase, Yongqianbao, Baidu, Tencent
- If the the applicant agrees, fintech companies gain access to online data, such as social media (WeChat moments) or Tmall shopping

- A “big brother” social credit system by the Chinese government
  - Stated goal is to "provide the trustworthy with benefits and discipline the untrustworthy … [so that] integrity becomes a widespread social value"

The all-seeing state: China's plans for total data control



Conclusion: Very interesting and important!

1. Is the response to the treatment too large?
2. Is there more to the treatment?
3. Emphasize the many surprising results more
4. Discuss how technological progress interacts with your conclusions